

CLAIMS

- 1.. (Cancelled)
2. (Cancelled)
3. (Cancelled)
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5. (Cancelled)
6. (Cancelled)
7. (Cancelled)
8. (Cancelled)
9. (Cancelled)
10. (Cancelled)
- 11 - 17. (Cancelled)

18. (Original) A low pressure dryer for granular or powdery material

comprising:

- a. a frame;
- b. a plurality of canisters movably carried on said frame at least among material heating and vacuum drying positions;
- c. a material fill hopper supported by said frame;
- d. a valve supported by said frame for permitting downward flow of material from said fill hopper into a movable canister located below said fill hopper; and

- e. means for sensing presence of a canister below said fill hopper and disabling said valve from opening in the absence of a canister thereat.
19. (Cancelled)
21. (Cancelled)
22. (Cancelled)
23. (Original) A plastics resin material dryer comprising:
- a. a rotatable carousel including vertically oriented vane means for vertically supporting a manually removable canister and moving said canister among heating and vacuum drying positions;
 - b. means for rotatably moving said carousel and supported canisters at least among said heating and vacuum drying positions;
 - c. at least one canister for holding resin material being manually mountable on and removable from said carousel and being moved by carousel rotation at least among said heating and vacuum drying positions; and
 - d. manually deactuable latching means for retaining a canister lowered into position on said carousel in locking engagement therewith.
24. (Original) The dryer of claim 23 wherein said carousel comprises:
- a. a first set of vertically elongated equi-angularly spaced blades; and
 - b. a plurality of second sets of vertically elongated blades, connected to respective blades of said first set, with the blades of respective second sets and an associated connected blade of said first set being equi-angularly spaced.

25. (Cancelled)
26. (Previously Presented) A vacuum dryer for granular or powdery material including:
- a. at least one canister movable serially among at least material heating and vacuum drying positions;
 - b. means for moving said canister among at least said heating and vacuum drying positions;
 - c. a blower;
 - d. a fitting for connecting a canister at the vacuum drying position to a source of vacuum; and
 - e. a manifold for selectably directing air from said blower either to a canister at said heating position or to a delivery device portion of said dryer for pneumatic conveyance of dried granular material from said dryer to a receptacle for molding or extrusion.
27. (Previously Presented) The dryer of claim 26 wherein said delivery device receives dried granular material via downward flow from a canister.
28. (Previously Presented) The dryer of claim 27 wherein said canister furnishing said granular material to said delivery device is removed from said material heating and vacuum drying positions.
29. (Previously Presented) The dryer of claim 26 wherein said canisters are movable serially and sequentially among said heating and vacuum drying positions and a third material inventory management position.

30. (Previously Presented) The dryer of claim 29 wherein said canisters are emptied of material at said third position.
31. (Previously Presented) The dryer of claim 29 wherein said canisters are drained of material at said third position.
32. (Previously Presented) The dryer of claim 29 wherein said canisters are loaded with material at said third position.
33. (Previously Presented) The dryer of claim 31 wherein said canisters are loaded with material at said third position.
34. (Previously Presented) The dryer of claim 26 wherein said canisters are cylindrical.
35. (Previously Presented) The dryer of claim 34 wherein said canisters are oriented with their axes vertical.
36. (Previously Presented) The dryer of claim 35 wherein said canisters move about a common vertical axis.
37. (Previously Presented) In a vacuum dryer for granular or powdery material including:
 - a. a plurality of canisters rotatable about a common vertical axis serially among material heating, vacuum drying and material inventory management positions;
 - b. means for moving said canisters about said axis among said heating, vacuum drying and material inventory management positions;
 - c. means for heating contents of a canister at the heating position;

d. means for drawing vacuum in a canister at the vacuum drying position;

the improvement by which said moving means further comprises:

e. a carousel rotatable about said axis for carrying said canisters among said heating, vacuum drying and material inventory management positions, comprising a plurality of vanes extending radially outwardly from a vertically extending axial shaft, said vanes having upwardly facing vertices for receiving pins extending outwardly from said canisters thereby to vertically support said canisters as said carousel rotates.

38. (Previously Presented) The dryer of claim 37 wherein said upwardly facing vertices receive first pins extending outwardly from said canisters and said vanes further include:

- a. downwardly facing vertices for receiving second pins extending outwardly from said canisters below said first pins; and
- b. manually actuable latches for retaining said second pins in said downwardly facing vertices.

39. (Previously Presented) The dryer of claim 38 wherein said latches are rotatable between positions at which said second pins are retained in said downwardly facing vertices and at which said second pins may fall freely out of said downwardly facing vertices.

40. (Previously Presented) The dryer of claim 39 wherein said latches, in said position at which said second pins are retained in said downwardly facing vertices, bear against said pins with downwardly directed surfaces which are

transverse to and radially spaced from a pivotal connection of said latch to an associated vane.

41. (Previously Presented) The dryer of claim 39 wherein said latches, in said position at which said second pins are retained in said downwardly facing vertices, bear against said pins with downwardly directed surfaces so that force received from said pins due to weight of said canister transfers to a vane along a line passing through pivotal connection of said latch and said latches are precluded from rotation about said pivotal connection.

42. (Previously Presented) The dryer of claim 37 wherein said canisters have curved exterior surfaces and said dryer further comprises resilient insulative covers fitting around said curved exterior surfaces with said covers including closure means for pulling respective edges of said covers towards one another thereby resiliently retaining said covers in place on said canisters.